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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/656,587

09/05/2003

Murat Karaorman

TI-35488 (1962-06500)

7924

23494

7590

01/11/2007

TEXAS INSTRUMENTS INCORPORATED

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EXAMINER

GEIB, BENJAMIN P

ART UNIT

PAPER NUMBER

2181

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

01/11/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No. 10/656,587	Applicant(s) KARAORMAN, MURAT	
	Examiner Benjamin P. Geib	Art Unit 2181	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2006.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5, 6, 8, 10-13, 15, 16, 18, 20-23, 25, 26, 28 and 30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6, 8, 10-13, 15, 16, 18, 20-23, 25, 26, 28 and 30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 October 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

*Fritz Fleming*  
FRITZ FLEMING  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100  
1/5/2007

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Claims 1-3, 5, 6, 8, 10-13, 15, 16, 18, 20-23, 25, 26, 28, and 30 have been examined.
2. It is hereby acknowledged that the following papers have been received and placed of record in the file: Amendment as received on 09/28/2006 and Drawings on 10/17/2006.

### ***Allowable Subject Matter***

3. Claims 1-3, 5, 6, 8, 10-13, 15, 16, 18, 20-23, 25, 26, 28, and 30 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, and 35 U.S.C. 101 set forth in this Office action.
4. The following is a statement of reasons for the indication of allowable subject matter: Independent claims 1, 10, 11, 20, 21, and 30 are directed towards facilitating communication between a physical resource and an algorithm. Storing the addresses of and branching to optimized functions as claimed, in combination with the other limitations of the independent claims, has not been found in the prior art and would not have been obvious.

### ***Claim Objections***

5. Claims 1, 11, and 21 are objected to because of the following informalities:  
Regarding claims 1, 11, and 21, the limitation "based upon the a vector table" should be changed to "based upon a vector table".

Regarding claim 10, the limitation "selected from the group comprise" on line 10 should be changed to "selected from the group comprising".

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-3, 5, 6, 8, 11-13, 15, 16, 18, 20 21-23, 25, 26, 28, and 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Claims 1, 11, and 21 recite the limitation "the plurality of functions comprise command functions that request and grant the identifier to the algorithm" in lines 9-11 and lines 10-11 for claims 1 and 11, respectively. As there is no previous mention of an identifier to the algorithm in the claims, there is insufficient antecedent basis for this limitation in the claims. The limitation "the plurality of functions comprise command functions that request and grant the identifier to the algorithm" will be interpreted as "the plurality of functions comprise command functions that request and grant an identifier to the algorithm" for the remainder of the examination as it appears to be what applicant intended.

9. Claim 1 recites the limitation "a function that is optimized for the configured settings" in lines 12-13. As there is no previous mention within the claim of configured settings, there is insufficient antecedent basis for this

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limitation in the claim. Since the claim later recites "the most recently configured settings of the logical resource", the limitation "a function that is optimized for the configured settings" will be interpreted as "a function that is optimized for configured settings of the logical resource" for the remainder of the examination as it appears to be what applicant intended.

10. Claims 1, 10, 11, 20, 21, and 30 recite the limitation "the most recently configured settings of the logical resource". As there is no previous mention of most recently configured settings of the logical resource in the claims, there is insufficient antecedent basis for this limitation in the claims. The limitation "the most recently configured settings of the logical resource" will be interpreted as "most recently settings of the logical resource" for the remainder of the examination as it appears to be what applicant intended.

11. The term "high-performance" in claims 11 and 20 is a relative term which renders the claim indefinite. The term "high-performance" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The phrase "high-performance hardware abstraction" is rendered indefinite by the term "high-performance" as it is unclear how high the performance the hardware abstraction would have to be for the hardware abstraction to be considered a high-performance hardware abstraction.

12. Claims 21 and 30 recite the limitation "A storage medium comprising software ... said software comprising" in the preamble. Since a storage medium cannot comprise software (i.e. instructions), this limitation renders the claim

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indefinite. Further, it is unclear whether applicant intends to claim a storage medium or software per se. While a storage medium may have instructions stored or embedded thereon, a storage medium cannot physically be made of (i.e. comprise) instructions.

13. Claims 11-13, 15, 16, 18, and 20 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: achieving high-performance hardware abstraction. The preambles of claims 11 and 20 state that each claim is a "method for achieving high-performance hardware abstraction". However, the method steps for each claim do not refer to a hardware abstraction or achieving high-performance thereof.

14. All claims rejected by 35 U.S.C. 112, second paragraph, that have not been specifically addressed above are rejected on the basis of dependence.

### ***Claim Rejections - 35 USC § 101***

15. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

16. Claims 21-23, 25, 26, 28, and 30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims could be construed as being directed toward functional descriptive material only (i.e. software per se) without a storage medium, which is needed to

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realize the program's functionality. An analysis of software per se concludes that it is not a process, machine, composition of matter, nor manufacture and, therefore, does not fall within any of the categories of patentable subject matter set forth in 35 U.S.C. 101. Therefore, the claims 21-23, 25, 26, 28, and 30 are directed toward non-statutory subject matter.

### ***Conclusion***

17. The following is text cited from 37 CFR 1.111(c): In amending in reply to a rejection of claims in an application or patent under reexamination, the applicant or patent owner must clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. The applicant or patent owner must also show how the amendments avoid such references or objections.

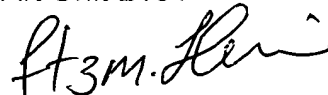
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin P. Geib whose telephone number is (571) 272-8628. The examiner can normally be reached on Mon-Fri 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fritz Fleming can be reached on (571) 272-4145. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Benjamin P Geib  
Examiner  
Art Unit 2181



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1/5/2007